

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION**

MONITORING AND REPORTING PROGRAM NO. R7-2002-0006
FOR
UNITED STATES MARINE CORPS BASE, OWNER/OPERATOR
MAINSIDE WASTEWATER TREATMENT PLANT
AND
WASTEWATER COLLECTION AND DISPOSAL SYSTEMS
Twentynine Palms – San Bernardino County

Location of Discharge: NW ¼ of Section 19, T2N, R9E, and NW ¼ of Section 29, T2N, R9E, SBB&M

MONITORING

1. The collection, preservation and holding times of all samples shall be in accordance with United States Environmental Protection Agency (USEPA) approved procedures. Unless otherwise approved by the Regional Board’s Executive Officer, all analyses shall be conducted by a laboratory certified by the State Department of Health Services. All analyses shall be conducted in accordance with the latest edition of the “Guidelines Establishing Test Procedures for Analysis of Pollutants” (40CFR Part 136), promulgated by the USEPA.
2. Samples shall be collected at the location specified in the Permit. If no location is specified, sampling shall be conducted at the most representative sampling point available.
3. If the facility is not in operation, or there is no discharge during a required reporting period, the discharger shall forward a letter to the Regional Board indicating that there has been no activity during the required reporting period.

INFLUENT MONITORING

<u>Constituents</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
20°C BOD ₅ ¹	mg/L ²	24-Hr. Composite or 4 grab samples in an 8-hour period ³	Once every two weeks
Suspended Solids	mg/L	24-Hr. Composite or 4 grab samples in an 8-hour period	Once every two weeks
Flow (Total Plant influent)	MGD ⁴	Flow Measurement	Daily ⁵

¹ BOD₅ - Biochemical Oxygen Demand

² mg/L - Milligrams per Liter

³ The period shall be between 6 am through 4 pm.

⁴ MGD - Million Gallons-Per-Day

⁵ Reported for each day with average monthly flow calculated

SECONDARY EFFLUENT MONITORING

A sampling station shall be established at the point of discharge of the secondary clarifier (algae harvester) and shall be located where representative samples of effluent can be obtained: (in the event that the algae harvester is being repaired or cleaned, a representative sample can be taken at the lamella plate separator)

<u>Constituents</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
20°C BOD ₅	mg/L	24-Hr. Composite or 4 grab samples in an 8-hour period	Once every two weeks
Suspended Solids	mg/L	24-Hr. Composite or 4 grab samples in an 8-hour period	Once every two weeks
Flow (Total Plant Effluent)	MGD	Flow Measurement	Daily ⁶
pH	pH units	Grab	Daily
Total Dissolved Solids	mg/L	Grab	Monthly
Nitrate as N (NO ₃ -N)	mg/L	Grab	Monthly
Nitrite as N (NO ₂ -N)	mg/L	Grab	Monthly
Volatile Organic Compounds ⁷	µg/L ⁸	Grab	Annually
Total Nitrogen	mg/L	Grab	Monthly

DISINFECTED SECONDARY-23 TREATED AND TERTIARY TREATED RECYCLED WATER MONITORING

Disinfected secondary-23 treated and disinfected tertiary treated recycled water shall be sampled at the discharge of the 1 MG storage tank for the following constituents:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Total Coliform	MPN ⁹ /100 ml	Grab	Daily ¹⁰
Volume of Wastewater Used for Irrigation	Gallons/Day	Flow Measurement	Monthly
Turbidity ¹¹	NTU ¹²	Continuous	Meter Reading ¹³

⁶ Reported for each day with average monthly flow calculated.

⁷ Analysis of Volatile Organic Compounds is to be accomplished using the USEPA test methods 601 and 602 or 624.

⁸ µg/L - microgram-per-liter

⁹ MPN - Most Probable Number

¹⁰ To be taken during highest flow and influent characteristics demand on the treatment and chlorination facilities. The sample shall be taken at the discharge point of the 1-MG storage reservoir. Sampling time and location shall be included with all Monitoring Reports.

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Chlorine Residual	mg/L	Continuous	Meter Reading ¹⁴
CT ¹⁵	mg/L • min	Calculated	Daily ¹⁶

WATER SUPPLY TO THE COMMUNITY

The domestic water supply shall be sampled for the following constituent:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Total Dissolved Solids	mg/L	Grab	Monthly

OPERATION AND MAINTENANCE

The discharger shall report the following:

<u>Activity</u>	<u>Reporting</u>
To inspect and document any operation/maintenance problems by inspecting each unit process. In addition, calibration of flow meters and equipment shall be performed in a timely manner and documented.	Annually
The amount of chlorine shall be monitored daily and reported monthly. Chlorine shall be measured in pounds per day.	Monthly

SLUDGE MONITORING

The discharger shall report annually on the quantity, location and method of disposal of all sludge and similar solid materials being produced at the wastewater treatment plant facility.

The sludge that is generated at the treatment facility shall be sampled and analyzed for the following:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Arsenic	mg/kg ¹⁷	Composite	Annually
Cadmium	mg/kg	Composite	Annually

¹¹ Turbidity to be measured only for disinfected tertiary treated recycled water.

¹² NTU – Nephelometric Turbidity Unit

¹³ Reported for each day with average daily turbidity calculated.

¹⁴ Reported for each day with average chlorine residual calculated.

¹⁵ CT is the product of total residual chlorine and modal contact time measured at the same point. This is to be measured for disinfected tertiary treated recycled water.

¹⁶ To be calculated during highest flow and influent characteristics demand on the treatment and chlorination facilities.

¹⁷ mg/kg - Milligrams per Kilogram

Copper	mg/kg	Composite	Annually
<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Lead	mg/kg	Composite	Annually
Mercury	mg/kg	Composite	Annually
Molybdenum	mg/kg	Composite	Annually
Nickel	mg/kg	Composite	Annually
Selenium	mg/kg	Composite	Annually
Zinc	mg/kg	Composite	Annually
Fecal Coliform	MPN/gram	Composite	Annually

REPORTING

1. The discharger shall arrange the data in tabular form so that the specified information is readily discernible. The data shall be summarized in such a manner as to clearly illustrate whether the facility is operating in compliance with waste discharge requirements.
2. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurement(s);
 - b. The individual(s) who performed the sampling or measurement(s);
 - c. The date(s) analyses were performed;
 - d. The individual(s) who performed the analyses;
 - e. The analytical techniques or method used; and
 - f. The results of such analyses.
3. The results of any analysis take, more frequently than required at the locations specified in this Monitoring and Reporting Program shall be reported to the Regional Board.
4. Monitoring reports shall be certified under penalty of perjury to be true and correct, and shall contain the required information at the frequency designated in this monitoring report.
5. Each report shall contain the following statement:

"I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true,

accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations".

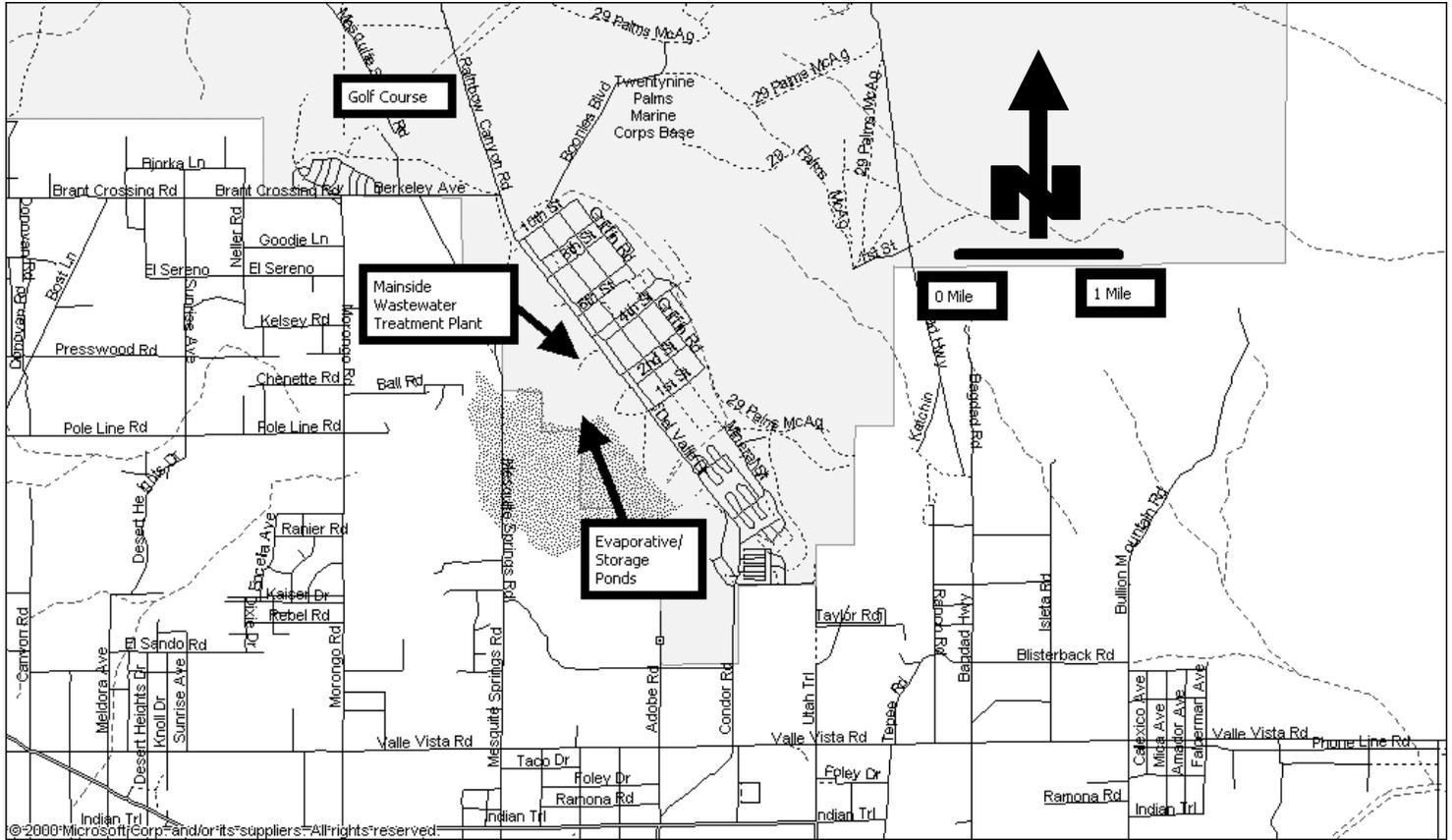
6. A duly authorized representative of the discharger may sign the documents if:
 - a. The authorization is made in writing by the person described above;
 - b. The authorization specified an individual or person having responsibility for the overall operation of the regulated disposal system; and
 - c. The written authorization is submitted to the Regional Board's Executive Officer.
7. Reporting of any failure in the facility (wastewater treatment plant, and collection and disposal systems) shall be as described in Provision No. 10. Results of any analysis performed as a result of a failure of the facility shall be provided within 10 days after collection of the samples.
8. The discharger shall attach a cover letter to the Self-Monitoring Report. The information contained in the cover letter shall clearly identify violations of the WDRs, discuss corrective actions taken or planned, and the proposed time schedule of corrective actions. Identified violations should include a description of the requirements that was violated, and description of the violations.
9. Daily, semi-weekly and monthly monitoring reports shall be submitted to the Regional Board by the 15th day of the following month. Quarterly monitoring reports shall be submitted to the Regional Board by January 15, April 15, July 15, and October 15, of each year. Annual monitoring reports shall be submitted to the Regional Board by January 15 of each year.
10. Submit monitoring reports to:

California Regional Water Quality Control Board
Colorado River Basin Region
73-720 Fred Waring, Suite 100
Palm Desert, CA 92260

Ordered by: _____
Executive Officer

Date

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION**



SITE MAP

**UNITED STATES MARINE CORPS BASE
WASTEWATER TREATMENT PLANT
AND
WASTEWATER COLLECTION AND DISPOSAL SYSTEMS
Twentynine Palms – San Bernardino County
NW ¼ of Section 29, T2N, R9E, SBB&M (Wastewater Treatment Plant)
NW ¼ of Section 19, T2N, R9E, SBB&M (Golf Course)**

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